

United States Patent and Trademark Office



MS

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. | |
|--|-----------------|----------------------|-------------------------|-------------------------|--|
| 09/910,348 07/23/2001 | | Randall Lee Carter | RD-27764 | 2297 | |
| 6147 7: | 590 11/04/2002 | | | | |
| GENERAL E | LECTRIC COMPANY | | EXAMINER | | |
| GLOBAL RESEARCH CENTER PATENT DOCKET RM. 4A59 PO BOX 8, BLDG. K-1 ROSS NISKAYUNA, NY 12309 | | | KEEHAN, CHRISTOPHER M | | |
| | | | ART UNIT | PAPER NUMBER | |
| 14102111101111 | | | 1712 | 5 | |
| | | | DATE MAILED: 11/04/2002 | DATE MAILED: 11/04/2002 | |

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | 70-5 | | | | |
|--|--|---|--|--|--|--|
| | Application No. | Applicant(s) | | | | |
| Office Action Summer: | 09/910,348 | CARTER ET AL. | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Christopher M. Keehan | 1712 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute - Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). Status | 36(a). In no event, however, may a reply be to within the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDON | imely filed ys will be considered timely. in the mailing date of this communication. ED (35 U.S.C. § 133). | | | | |
| 1) Responsive to communication(s) filed on 24 S | September 2002 . | | | | | |
| 2a) This action is FINAL . 2b) ⊠ Th | is action is non-final. | | | | | |
| 3) Since this application is in condition for allows | ance except for formal matters, | prosecution as to the merits is | | | | |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims | | | | | | |
| 4)⊠ Claim(s) <u>1-65</u> is/are pending in the application. | | | | | | |
| 4a) Of the above claim(s) 33-65 is/are withdraw | vn from consideration. | | | | | |
| 5) Claim(s) is/are allowed. | | | | | | |
| 6)⊠ Claim(s) <u>1-32</u> is/are rejected. | | | | | | |
| 7) Claim(s) is/are objected to. | | | | | | |
| 8) Claim(s) are subject to restriction and/o | r election requirement. | _ | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examiner. | | | | | | |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ acce | | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| 11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner. | | | | | | |
| If approved, corrected drawings are required in reply to this Office action. | | | | | | |
| 12) The oath or declaration is objected to by the Examiner. | | | | | | |
| Priority under 35 U.S.C. §§ 119 and 120 | | | | | | |
| 13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). | | | | | | |
| a) All b) Some * c) None of: | | | | | | |
| 1. Certified copies of the priority documents have been received. | | | | | | |
| 2. Certified copies of the priority documents have been received in Application No | | | | | | |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| 14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). | | | | | | |
| a) The translation of the foreign language provisional application has been received. | | | | | | |
| 15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121. Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) | | ary (PTO-413) Paper No(s) al Patent Application (PTO-152) | | | | |
| 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2 | · <u>=</u> | are stories periodicion (r. 10-102) | | | | |

Art Unit: 1712

DETAILED ACTION

Election/Restrictions

Applicant's election with traverse of Group I in Paper No. 4 is acknowledged. The traversal is on the ground(s) that Groups I-IV are so closely related that an examination of all these claims together would not constitute a serious burden on the examiner. This is not found persuasive. For instance, the invention of Group I requires a polyorganosiloxane that is free from alternating cyclic hydrocarbon residues, but Group II does not require this limitation – the composition of Group I is a materially different composition than that made by the process of Group II. Group III, which is a light bulb, would not necessarily be found upon the examination of Group I, a composition. A light bulb can have a different composition present than Applicant's, such as a composition with no hindered amine light stabilizer. The composition of Group III is also not the same as that of Group I. The article of Group III, can be made by another and materially different process than that of Group IV, such as using a cyclic, vinyl-containing hydrocarbon fluid. The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

⁽a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 1712

Claims 1-17, 20-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (5,013,800) in view of Costanzi et al. (5,350,786). Inoue et al. disclose a composition comprising a polyorganosiloxane wherein the polyorganosiloxane is free from alternating cyclic hydrocarbon residues (col.3, line 8-col.6, line 10), and the inclusion of aging retarders and ultraviolet absorbers (col.7, lines 1-4). Costanzi et al. disclose the addition of hindered amine light stabilizers to an alkenyl-containing compound (Abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the hindered amine light stabilizer of Costanzi et al. to the composition of Inoue et al. because Costanzi et al. teach that adding a hindered amine light stabilizer to an alkenyl-containing composition reduces aging and absorbs ultraviolet radiation resulting in a higher quality composition.

Regarding claim 2, Inoue et al. disclose wherein the polyorganosiloxane comprises moieties of [(CH₃)₂SiO] (col.3, lines 8-67) and a terminal trimethoxysilane unit [(CH₃)₃SiO_{0.5}] (col.5, line 8-col.6, line 10).

Regarding claims 3-5, 7-9, and 20-22, Inoue et al. disclose wherein the polyorganosiloxane comprises [(CH₃)₃SiO_{0.5}] added in the composition from 1 to 100 parts by weight of the moieties of [(CH₃)₂SiO] (col.6, lines 11-21). It appears that Inoue et al. do not specifically disclose the instantly claimed mole percentages. However, Inoue et al. do disclose criticality as to the amount of [(CH₃)₃SiO_{0.5}] added, which appears to be a result-effective variable (col.6, lines 11-21). Therefore, if not inherently disclosed by Inoue et al., and as Applicant has does not appear to have shown any criticality as to the instantly claimed amounts, then it would have been obvious to one of

Art Unit: 1712

ordinary skill in the art at the time the invention was made to have added the instantly claimed amounts through routine experimentation. A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine experimentation. *In re Boesch, 205 USPQ 215.* It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Regarding claim 6, Inoue et al. disclose wherein the polyorganosiloxane is a reaction product of a non-cyclic, vinylsiloxane fluid and an organohydrogensiloxane crosslinker (col.3, line 8-col.6, line 10).

Regarding claims 10-13, Inoue et al. disclose adding fumed silica filler and extending and reinforcing fillers selected from the group as instantly claimed, by adding these fillers to improve the mechanical properties of the cured coating, which appears to be a result-effective variable (col.7, lines 10-20). Although Inoue et al. do not specifically disclose the instantly claimed amounts, and as Applicant has does not appear to have shown any criticality as to the instantly claimed amounts, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the instantly claimed amounts through routine experimentation and optimization. A particular parameter must first be recognized as a result-effective variable, i.e., a variable which achieves a recognized result, before the determination of the optimum or workable ranges of said variable might be characterized as routine

Art Unit: 1712

experimentation. *In re Boesch, 205 USPQ 215.* It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Regarding claim 14, Inoue et al. disclose adding a platinum catalyst (col.6, lines 35-62).

Regarding claims 15-17, Inoue et al. disclose a vinylsiloxane fluid comprising vinylsiloxy units (col.4, lines 43-68). Inoue et al. do not appear to have disclosed the instantly claimed amounts. However, if not inherently disclosed by Inoue et al., and as Applicant has shown no criticality as to the instantly claimed amounts, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the vinylsiloxane to have contained a variety of amounts of vinylsiloxy units, including that as instantly claimed, through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Regarding claim 23, it appears Inoue et al. do not specifically disclose wherein the organopolysiloxane has the instantly claimed viscosity. However, because the materials of Inoue et al. are at least similar to those of Applicant's, and it appears that Applicant has shown no criticality as to the instantly claimed properties, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the

Art Unit: 1712

composition of Inoue et al. to have at least similar properties because at least similar materials would have yielded at least similar properties.

Regarding claim 24, Inoue et al. disclose an organohydrogen crosslinker comprising the instantly claimed unit (col.5, lines 8-20), and wherein R⁴ represents the hydrocarbon radical selected from the instantly claimed group (col.5, lines 8-20 and col.4, lines 38-42). It appears that Inoue et al. do not specifically disclose combining in the instantly claimed ratio. However, as Applicant has shown no criticality as to the instantly claimed ratio, and if not inherently disclosed by Inoue et al., then it would have been obvious to one of ordinary skill in the art at the time the invention was made to have achieved an at least similar ratio through routine experimentation and optimization. It has been held that where the general conditions are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. *In re Aller, 105 USPQ 233, 235.*

Regarding claim 25, Inoue et al. disclose wherein the alkyl radical comprises carbon atoms in the instantly claimed range (col.5, lines 8-20 and col.4, lines 38-42).

Regarding claim 26, the same reasoning as set forth above for claim 1 also applies to claim 26, except for the specifically claimed structure of the hindered amine light stabilizer. Costanzi et al. disclose the instantly claimed hindered amine light stabilizer (col.9, line 42-col.10, line 13).

Regarding claim 29, Inoue et al. disclose wherein the methylsiloxane moiety forms a linear chain with trimethylsiloxane end groups (col.10, lines 11-13).

Art Unit: 1712

Regarding claims 27 and 28, Inoue et al. do not specifically disclose the instantly claimed limitations. However, because the materials of Inoue et al. are at least similar to those of Applicant, and because Applicant has shown no criticality as to the instantly claimed structures, if not inherently disclosed by Inoue et al., then it would have been obvious to one of ordinary skill in the art at the time the invention was made for the composition of Inoue et al. to have achieved the instantly claimed structures because the materials of Inoue et al. appear to be the same as Applicant's, and at least similar materials would have yielded at least similar results.

Regarding claims 30-32, Inoue et al. do not specifically disclose the instantly claimed amounts of hindered amine light stabilizer. Costanzi et al. disclose the hindered amine light stabilizer present from 0.005 to 1% by weight (col.11, lines 31-35), which is included in the instantly claimed range. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have added the stabilizer as taught by Costanzi et al. in the composition of Inoue et al. because Costanzi et al. teach that a hindered amine light stabilizer presence of from 0.005 to 1% by weight in an alkenyl-containing composition reduces aging and absorbs ultraviolet radiation resulting in a higher quality composition.

Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inoue et al. (5,013,800) in view of Costanzi et al. (5,350,786) as applied to claim 1 above, and further in view of Maguire et al. (5,034,061). The Inoue et al. combination, as applied to claim 1 above, are as set forth and incorporated herein. The Inoue et al.

Art Unit: 1712

combination disclose a vinylsiloxane (col.4, lines 43-68). The Inoue et al. combination do not appear to specifically disclose the instantly claimed vinylsiloxane. Maguire et al. disclose a polysiloxane composition the same as instantly claimed (col.3, lines 1-47), and a vinylsiloxane as instantly claimed (col.3, lines 11-25), and the addition of small amounts of stabilizers and fillers (col.9, lines 18-25). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have substituted the vinylsiloxane of Maguire et al. in the Inoue et al. combination because Maguire et al. teach that using the vinylsiloxane compound produces a transparent and fast curing composition, resulting in a more efficient composition.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher M. Keehan whose telephone number is (703) 305-2778. The examiner can normally be reached on Monday-Friday, from 6:30 to 3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert A. Dawson can be reached on 308-2340. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Art Unit: 1712

Page 9

October 31, 2002

Robert Dawson Supervisory Patent Examiner Technology Center 1700

Robert a Sanson